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AMENDMENTS TO THE CLAIMS WITH STATUS INDICATORS

We claim:

1. (Currently Amended) A process for preparing polytetrahydrofuran, polytetrahydrofuran copolymer, diester or monoester by comprising polymerizing tetrahydrofuran in the presence of: (i) at least one telogen and/or comonomer and (ii) of an acidic heterogeneous catalyst based on activated sheet silicates or mixed metal oxides in a fluidized bed.
2. (Currently Amended) A The process as claimed in claim 1, wherein the expansion factor of the catalyst bed is \leq less than or equal to 1.15; ~~preferably < 1.10 and more preferably < 1.05~~.
3. (Currently Amended) A The process as claimed in claim 1, wherein the expansion factor of the catalyst bed is from 1.01 to 4; ~~preferably from 1.05 to 2, more preferably from 1.1 to 1.5~~.
4. (Currently Amended) A The process as claimed in any of claims 1 to 3claim 1, wherein the catalyst used comprises at least one oxide selected from the group consisting of SiO₂, TiO₂, and/or ZrO₂, ~~and is more preferably based on acid-activated montmorillonite, Al₂O₃/SiO₂, ZrO₂/SiO₂, WO_x/TiO₂ or WO_x/ZrO₂, in particular on acid-activated montmorillonite, or on Al₂O₃/SiO₂, ZrO₂/SiO₂~~.
5. (Currently Amended) A The process as claimed in any of claims 1 to 4claim 4, wherein the catalyst is based at least one material selected from the group consisting of on acid-activated montmorillonite, Al₂O₃/SiO₂, ZrO₂/SiO₂, WO_x/TiO₂, ~~or and~~ WO_x/ZrO₂ ~~used has a pycnometric density of from 1.5 to 10 g/cm³, preferably from 2 to 7 g/cm³, in particular from 2 to 4 g/cm³~~.
6. (Currently Amended) A The process as claimed in any of claims 1 to 5claim 1, wherein the ~~porosity of the catalyst is from 0.05 to 5 cm³/g, preferably from 0.1 to 2 cm³/g, more preferably from 0.2 to 1.5 cm³/g~~ used has a pycnometric density of from 1.5 to 10 g/cm³.

7. (Currently Amended) A The process as claimed in any of claims 1 to 6claim 1, wherein the individual catalyst particles have a volume of from $500 \mu\text{m}^3$ to 5 cm^3 , preferably from 0.0005 mm^3 to 1000 mm^3 , more preferably from 0.01 to 100 mm^3 , in particular from 0.1 to 30 mm^3 porosity of the catalyst is from 0.05 to $5 \text{ cm}^3/\text{g}$.
8. (Currently Amended) A The process as claimed in any of claims 1 to 7claim 1, wherein the bed density of the catalyst is from 250 to 2500 g/l , preferably from 400 to 2000 g/l individual catalyst particles have a volume of from $500 \mu\text{m}^3$ to 5 cm^3 .
9. (Currently Amended) A The process as claimed in any of claims 1 to 8claim 1, wherein the reactor is flowed through from bottom to topbed density of the catalyst is from 250 to 2500 g/l .
10. (Currently Amended) A The process as claimed in any of claims 1 to 9claim 1, wherein the catalyst or portions of the catalyst volume are withdrawn from and/or fed to the polymerization reactor continuously, at regular intervals or batchwise, without the reactor being emptied and/or the polymerization reaction being interrupted for this purposethe reactor is flowed through from bottom to top.
11. (Currently Amended) A The process as claimed in claim 1, wherein tetrahydrofuran is polymerized in the presence of carboxylic anhydride, preferably acetic anhydride, to give polytetrahydrofuran or derivatives and copolymers thereof having molecular weights of from 250 to $10\,000$ dalton, preferably from 500 to $5\,000$ dalton, in particular from 650 to $4\,000$ daltonthe catalyst or portions of the catalyst volume are withdrawn from and/or fed to the polymerization reactor continuously, at regular intervals or batchwise, without the reactor being emptied and/or the polymerization reaction being interrupted for this purpose.
12. (Currently Amended) A The process as claimed in any of claims 1 to 11claim 1, wherein the reactor is operated in circulation and the ratio of circulation to feed is less than or equal to $200/1$, preferably from $1/1$ to $150/1$, in particular from $5/1$ to $100/1$ tetrahydrofuran is polymerized in the presence of carboxylic anhydride to give polytrethahydrofuran or derivatives and copolymers thereof having molecular weights of from 250 to $10,000$ dalton.

13. (Currently Amended) A The process as claimed in any of claims 1 to 12claim 12, wherein the catalyst hourly space velocity is from 0.01 to 3.0 kg of THF/kg of catalyst * h, preferably from 0.02 to 1.5 kg of THF/kg of catalyst * h and more preferably from 0.04 to 0.75 kg THF/kg of catalyst * hthe anhydride is acetic anhydride.
14. (Currently Amended) A The process as claimed in any of claims 1 to 12claim 1, wherein the superficial velocity is from 0.1 to 200 m³/m²*h, preferably from 0.5 to 100 m³/m²*hthe reactor is operated in circulation and the ratio of circulation to feed is less than or equal to 200/1.
15. (New) A The process as claimed in claim 1, wherein the catalyst hourly space velocity is from 0.01 to 3.0 kg of THF/kg of catalyst * h per hour.
16. (New) A The process as claimed in claim 1, wherein the superficial velocity is from 0.1 to 200 m³/m²*h per hour.
17. (New) The process as claimed in claim 6, wherein the catalyst used has a pycnometric density of from 2 to 7 g/cm³.
18. (New) The process as claimed in claim 7, wherein the porosity of the catalyst is from 0.1 to 2 cm³/g.
19. (New) The process as claimed in claim 18, wherein the porosity of the catalyst is from 0.2 to 1.5 cm³/g.